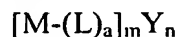


1. An electrode composition comprising:  
a current conducting material; and  
a heteroaryl-metal complex in contact with said current conducting material,  
wherein said heteroaryl-metal complex is of the formula:



wherein

a is an integer from 1 to 6;

m and n are absolute value of oxidation state of Y or  $[M-(L)_a]$ , respectively; or

if  $[M-(L)_a]$  is not charged Y is not present and said heteroaryl-metal complex is of the formula  $M-(L)_a$ ;

M is a metal;

Y is a counterion; and

each L is independently a heteroaryl moiety containing one or more coordinating heteroatoms.

2. The electrode composition of Claim 1 having work function of about 3.5 eV or less.

3. The electrode composition of Claim 1, wherein said heteroaryl-metal complex is of the formula  $M-(L)_n$ .

4. The electrode composition of Claim 3, wherein a is an integer of 2 or

5. The electrode composition of Claim 4, wherein M is a transition metal.

6. The electrode composition of Claim 5, wherein M is selected from the group consisting of Ru, Cr, Fe, Zn, Co, Mn, Cu, Os, Rh, and Ni.

7. The electrode composition of Claim 6, wherein M is selected from the group consisting of Ru and Cr.

8. The electrode composition of Claim 5, wherein L is a polypyridyl or phenanthroline moiety.

1                   9.       The electrode composition of Claim 8, wherein L is selected from the  
2 group consisting of optionally substituted 2,2'-bipyridyl, optionally substituted 1,10-  
3 phenanthroline, optionally substituted 2,2',6',2''-terpyridyl and a derivative thereof.

1                   10.      The electrode composition of Claim 8, wherein L is a polypyridyl  
2 moiety.

1                   11.      The electrode composition of Claim 10, wherein L is selected from the  
2 group consisting of 4,4',5,5'-tetramethyl-2,2'-bipyridyl; 2,2'-bipyridyl; and 2,2',6',2''-  
3 terpyridyl.

1                   12.      The electrode composition of Claim 1, wherein said current conducting  
2 material is a metal or a metal alloy.

1                   13.      The electrode composition of Claim 12, wherein said current  
2 conducting material comprises silver, gold or a mixture thereof.

1                   14.      A light emitting device comprising  
2 an anode;  
3 a cathode comprising a current conducting material in contact with a  
4 heteroaryl-metal coordination complex; and  
5 an organic light emissive material located inbetween said anode and said  
6 heteroaryl-metal coordination complex.

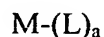
1                   15.      The light emitting device of Claim 14, wherein the work function of  
2 said heteroaryl-metal coordination complex is 3.5 eV or less.

1                   16.      The light emitting device of Claim 15 further comprising an organic  
2 hole transport material located inbetween said light emissive material and said anode.

1                   17.      The light emitting device of Claim 16, wherein said heteroaryl-metal  
2 coordination complex is thermally evaporated to form a conducting thin film.

1                   18.      An electronic device comprising an electrode of Claim 1.

1                    19.     A composition comprising a metal or a metal alloy in contact with a  
2 heteroaryl-metal coordination complex, wherein said heteroaryl-metal coordination complex  
3 is of the formula:



4  
5 wherein

6                    a is an integer from 1 to 6;

7                    M is a metal;

8                    Y is a counterion; and

9                    each L is independently a heteroaryl moiety containing one or more  
10                    coordinating heteroatoms.

1                    20.     A method for producing a light emitting device, said method  
2 comprising:

3                    forming a thin film of heteroaryl-metal coordination complex on a first  
4 electrode; and attaching a second electrode to the heteroaryl-metal coordination complex  
5 film, wherein one of the first or the second electrodes comprises a thin film of light emissive  
6 material and one of the first or the second electrode is an anode and the other is a cathode.

1                    21.     The method of Claim 20, wherein the heteroaryl-metal coordination  
2 complex is vacuum vapor deposited onto the first electrode.

1                    22.     The method of Claim 21, wherein the first electrode comprises a metal  
2 oxide coated with a thin film of a conducting polymer.

1                    23.     The method of Claim 20, wherein the second electrode is vacuum  
2 vapor deposited onto the heteroaryl-metal coordination complex.

1                    24.     The method of Claim 20, wherein the first electrode comprises a  
2 patterned substrate.